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09/297,256	04/28/1999	GORAN SUNDHOLM	U012229-2	9504

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LADAS & PARRY  
26 WEST 61ST STREET  
NEW YORK, NY 10023

EXAMINER

KIM, CHRISTOPHER S

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Paper No. 42

Application Number: 09/297,256  
Filing Date: April 28, 1999  
Appellant(s): SUNDHOLM, GORAN

\_\_\_\_\_  
William R. Evans  
For Appellant

EXAMINER'S ANSWER

MAILED  
JUN 25 2003  
GROUP 3700

This is in response to the appeal brief filed May 27, 2003.

(1) *Real Party in Interest*

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A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

Appellant's brief includes a statement that claims 1-14 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) *Prior Art of Record***

3,012,613	Diquattro	12-1961
3,613,794	Naumann	10-1971

3,827,502	Lockwood	8-1974
4,082,148	Willms	4-1978

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

Claim 1 stands rejected under 35 U.S.C. 102(b) as being anticipated by Naumann (3,613,794).

Naumann discloses a fire fighting apparatus comprising: a plurality of spray heads 25; a tube system 13; a first drive gas source 15, 17; and release means 27.

***Claim Rejections - 35 USC § 103***

Claims 1-7 and 9-14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Diquattro (3,012,613) in view of Lockwood (3,827,502).

With respect to claims 1, 11, 13 and 14, Diquattro discloses a fire fighting apparatus comprising: a plurality of spray heads 1-8; a tube system 16a-c, 12, 14, 18; a first drive gas source 10; a release means 28. Diquattro discloses, in figure 1, by way of example (column 2, lines 40-41), receptacles 16a-c being cylinder-like and varying the size and capacity to meet various combinations of requirements (column 3, lines 48-51). Lockwood teaches a tube shape in figure 1 and a cylinder shape in figure 2 for changing the capacity of extinguishant (column 3, lines 29-32). Lockwood also teaches various lengths of tubing in figures 3-5. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have shaped the receptacles of Diquattro

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into a tube shape of appropriate length as taught by Lockwood to meet various operating requirements (Diquattro, column 3, lines 50-52).

With respect to claims 2, 4, 6, 7, Diquattro in view of Lockwood discloses the limitations of the claimed invention with the exception of the plurality of drive gas sources. Providing a plurality of drive gas sources is a mere duplication of parts. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have provided a plurality of drive gas sources in the device of Diquattro in view of Lockwood for redundancy and backup.

With respect to claim 3, Diquattro further discloses a stop/opening valve 15.

With respect to claim 5, Diquattro further discloses, in column 2, lines 26-28, nitrogen at 3000 psi (206.85 bar) as an example of gas in drive gas source 10.

With respect to claims 9 and 10, Diquattro in view of Lockwood discloses the limitations of the claimed invention with the exception of a tunnel. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have used the device of Diquattro in view of Lockwood in a tunnel to prevent fires in a tunnel.

With respect to claim 12, Diquattro in view of Lockwood discloses the limitations of the claimed invention with the exception of the water-based liquid. Water is well known in the art for use in fire fighting. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have used water as coolant in the device of Diquattro in view of Lockwood to reduce cost since water is readily available.

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Claim 8 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Diquattro (3,012,613) in view of Lockwood (3,827,502) as applied to claim 7 above, and further in view of Willms (4,082,148).

Diquattro in view of Lockwood discloses the limitations of the claimed invention with the exception of the solenoid valve. Willms discloses a fire fighting apparatus with zone 1 and zone 2 each zone having a release means 20, 20A and solenoid valve 17, 17A. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have replaced the release means of Diquattro in the device of Diquattro in view of Lockwood with the release means and solenoid valve of Willms to automate the device.

**(11) *Response to Argument***

**First Issue**

Appellant argues that the rejection under 35 USC 102(b) fails because it does not show in as complete detail as contained in the claim the long tube extinguishing medium source. Claim 1 recites "...an extinguishing medium source consisting essentially of a long tube (2;2') constituting part of the tube system." The term "tube" is defined as:

A hollow cylinder, especially one that conveys a fluid or functions as a passage.

The American Heritage® Dictionary of the English Language, Third Edition copyright © 1992 by Houghton Mifflin Company.

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The term "long" is a relative term. The specification gives examples of lengths such as 22.5 km. The specification, while giving examples, does not limit the term "long" to a specific range. The claim also fails to limit the range of length encompassed by the term "long." Therefore, rather than viewing the term "long" as being indefinite, it has been considered to be a broad recitation of length. Naumann disclose, in column 2, lines 37-38, a hollow cylinder 13 filled with liquid (quenching agents, column 1, line 19) to be dispensed (figures show a hollow cylinder). Naumann's hollow cylinder 13 is long when compared to another hollow cylinder which is 1/100 the length of hollow cylinder 13. The hollow cylinder of Naumann leads extinguishing medium (quenching agents) to the plurality of spray heads (outlet of 25).

Appellant argues that Appellant may be his own lexicographer and cites MPEP 2111.01. MPEP 2111.01 requires that claim words be given their plain meaning unless the special meaning assigned to a term is sufficiently clear in the specification. Appellant's specification fails to provide sufficiently clear assignment of any special meaning to the term "long tube." Appellant's specification recites "A long tube means in this connection primarily a tube having a length of the size of about 1 km and more." The terms "primarily" and "about" suggest that "long tube" is not limited to "1 km and more." Additionally, claims 1 and 14 are virtually identical. The only differences are the claim 1 recites "a first drive gas source" and "a long tube" while claim 14 recites "at least one drive gas source" and "a long tube (2;2') which has a length of at least about 1 km." The additional recitation "which has a length of at least about 1 km" in claim 14 is

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evidence that such a limitation is not required by the recitation "long tube." Therefore, the plain meaning, the dictionary definition, has been given to the term "long tube."

### Second Issue

Appellant indicates that Diquattro's manifold 12, conduit 14 and inlet 18 all relate to the drive gas source 10. Appellant's claims do not require such an interpretation of Diquattro. For example, claim 1 requires a tube system for leading extinguishing medium to the spray heads, a first drive gas source for driving the extinguishing medium at a high pressure via the tube system to the spray heads...the first drive gas source is coupled to an extinguishing medium source consisting essentially of a long tube constituting part of the tube system. The tube system comprises an extinguishing medium source which consists essentially of a long tube. The tube system may contain other elements in addition to the extinguishing medium source. The extinguishing medium source must consist essentially of a long tube. MPEP 2111.03 requires that "consisting essentially of" be construed equivalent to "comprising." Additionally, the claim does not limit how the elements are connected except that the drive gas source is coupled to the extinguishing medium source. The claim does not require that the drive gas source be directed coupled to the extinguishing medium source without any intervening elements. Therefore, Diquattro's elements 16a-c, 12, 14, 18 are considered to define a tube system and elements 16a-c are considered to define an extinguishing medium source consisting essentially of a long tube. Diquattro's tube system 16a-c, 12, 14, 18 is for leading extinguishing medium to spray heads 1-8 which are parts of outlet means 17.



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Appellant's reliance, that in order to support the rejection, it must be shown that the Lockwood patent has a contrary teaching toward an extinguishing medium source consisting essentially of a long tube system leading to spray heads, is misplaced. Diquattro discloses receptacles 16a-c as tubes. As under issue one, "tube" has been considered to mean a hollow cylinder. Diquattro discloses, in figure 1, by way of example (column 2, lines 40-41), receptacles 16a-c being cylinder-like and varying the size and capacity to meet various combinations of requirements (column 3, lines 48-51). Lockwood is only relied on for the teaching of changing the capacity, i.e. elongating a cylinder or tube. Lockwood teaches a tube shape in figure 1 and a cylinder shape in figure 2 for changing the capacity of extinguishant (column 3, lines 29-32). Lockwood also teaches various lengths of tubing in figures 3-5. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have shaped the receptacles of Diquattro into a tube shape of appropriate length as taught by Lockwood to meet various operating requirements (Diquattro, column 3, lines 50-52). Lockwood teaches that length of the tube is varied depending on use ranging from use in a television (figures 3, 4) to use in a boat (figure 5) to meet use and capacity (operating) requirements. One of ordinary skill in the art would recognize that use of use a device in an engine room of a tanker or a large cruise ship or in a long tunnel would require much longer tubes.


Appellant's arguments directed to the definition of "long tube" has been addressed under Issue One.


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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

  
Christopher S. Kim  
Examiner  
Art Unit 3752

CK   
June 19, 2003

Conferees  
MM, ROE 



LADAS & PARRY  
26 WEST 61ST STREET  
NEW YORK, NY 10023